

Nuclear Division News

• Vol. 13, No. 19 • September 16, 1982

Award recipients serve communities in many ways



Arendt



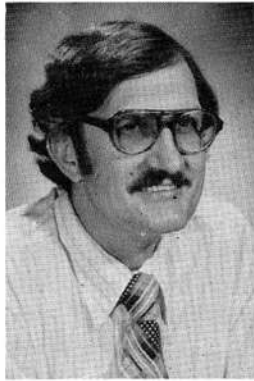
Bourgois



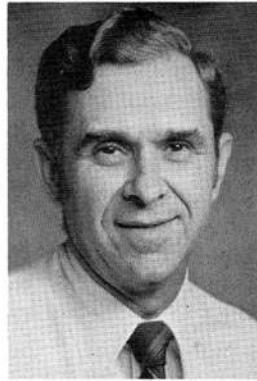
Briedert



Brown



Carpenter



Chandler

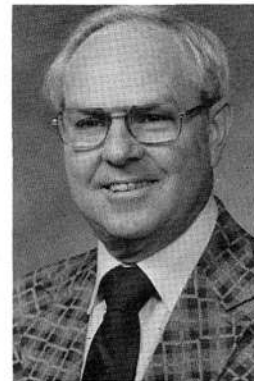


Collier

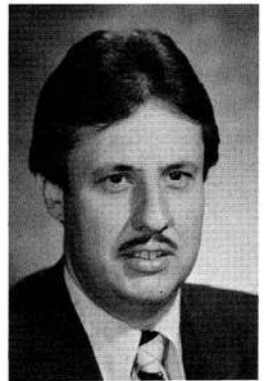
(Editor's note: Ten of the thirty-seven Nuclear Division recipients of Union Carbide Community Service Awards are profiled in the following story. The winners will be honored at special ceremonies next month for their participation in "voluntary, uncompensated activities that benefit their communities." They were nominated by Nuclear Division employees and selected by committees at each facility composed of Carbide and community representatives. Profiles of the other 27 recipients will appear in the next three issues of *Nuclear Division News*.)



Coutant



Crowder



Elrod

John W. Arendt, ORGDP — Arendt has done volunteer work in fund-raising activities for the past 31 years. During the last 10 years, he has devoted as many as 550 hours per year to work for the American Cancer Society and the United Way of Anderson County. He has served as chairman, president and vice president of the local chapter of the American Cancer Society and also has held other offices. Arendt has worked with the Nuclear Division's United Way Campaign, serving as ORGDP and Nuclear Division chairman. He currently is a member of the board of directors of the United Way of Anderson County. A resident of Oak Ridge, Arendt is engineering project manager in the ORGDP Separation Systems Division.

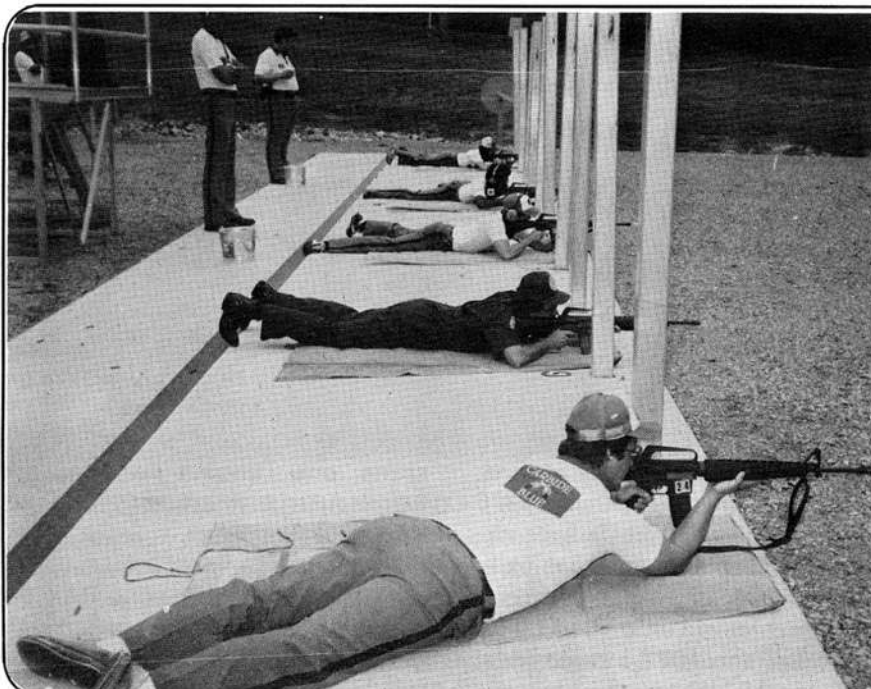
Louis G. Bourgois Jr., Paducah — Bourgois has worked with the Paducah/McCracken Disaster and Emergency Service for 29 years. In 1973, he redesigned the area's warning siren activation system, writing a new communications plan to comply with federal regulations. He helped to install the system and currently is involved in its maintenance. During weather alerts, Bourgois directs communications for weather networks and other sources within the four-state area. He also has been involved with the Boy Scouts of America as a scoutmaster for 15 years, helping 11 boys attain the rank of Eagle Scout. Bourgois, a resident of Paducah, is an instrument mechanic in the Fabrication and Maintenance Division.

Elmer C. Briedert, Paducah — Briedert, who has served as chairman of the local Red Cross water safety committee for 20 years, has taught hundreds of people to swim, as well as training hundreds of water safety instructors in swimming and lifesaving courses. He organized the Paducah swim team, serving as its coach for six years, and also developed and managed a program at Paducah pools and beaches for hiring summer lifeguards based on their water-safety skills. A resident of Paducah, Briedert is head of the Equipment and Systems Technology Department in the Technical Services Division.

Robert H. Brown, ORNL — Brown has served the Anderson

County Emergency Rescue Squad for the past 20 years as a first lieutenant, working in emergency situations such as fires, auto accidents, floods, cases of missing persons, etc. He also has instructed and assisted in many CPR classes. In addition to his work with the Rescue Squad, Brown has been involved with the American Red Cross and the American Heart Association and was a registered Emergency Medical Technician for six years. He spends more than 500 hours per year in community service work. Brown, who is a supervisor in the ORNL Instrumentation and Controls Division, lives in Oliver Springs.

(Please turn to page 8 for profiles of other award recipients.)



In this issue . . .

Sharpshooters from the three Oak Ridge plants have brought home honors again. In all categories — pistols, shotguns and rifles — security inspectors earned laurels. Their story is found on page 7.

Other features:

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Silver recovery from photographic wastes developed at ORNL

Chemists at ORNL have developed a process which can recover 99.999 percent of the silver from liquid photographic wastes — one of the most effective methods yet devised. The new process not only recovers a valuable metal but also removes a potentially toxic pollutant from the wastes.

Silver in the form of silver halide crystals is an important element in the production of photographs and photocopies. Each year, ORNL generates approximately 107,000 liters (30,000 gallons) of liquid photographic wastes with silver concentrations ranging from less than 1 to 20,000 milligrams per liter.

Despite the relatively high value of silver — currently approximately \$7 per troy ounce — the most important reason for silver recovery is the rem-

oval of an environmental pollutant. Silver ions have been shown to be toxic to aquatic systems.

Discharges controlled

For this reason, the Environmental Protection Agency and individual states stringently regulate the release of photographic effluents. Tennessee law limits the maximum discharge of silver ions into the environment to 0.05 mg/liter.

A key problem with silver recovery is that most processes produce silver sulfide — a compound that is expensive to remove and itself a pollutant. The sulfide results from the decomposition of photographic fixer (usually a compound of sodium thiosulfate), which is used to make a photographic image permanent.

In the photographic process, developer is used to convert silver halide that has been activated by light to silver metal. The fixer then removes the large amount of unreacted silver halide so that it will not react further with light. Consequently, more than two-thirds of the silver emulsion on film comes out in the fixer solution.

Pure silver recovered

In previous silver recovery processes, a chemical known as hypochlorite was added in small amounts to react with large volumes of silver-bearing photographic effluent. In the process, however, the silver-bearing effluent is pumped to a vessel containing excess hypochlorite. Thiosulfate (fixer) is oxidized in the reaction vessel and, through careful control of acidity, silver is released as silver chloride. Another chemical, sodium dithionite, then is added as a reducing agent to convert silver chloride to pure silver.

The key features — adding the silver-bearing effluent to hypochlorite and the use of sodium dithionite as a reducing agent — were developed by Franz Posey and Al Palko (now retired), Chemistry Division.

In initial tests, the process reduced silver content in the effluent from approximately 500 to less than 1 milligram per liter. Once the silver is filtered out, the remaining solution is

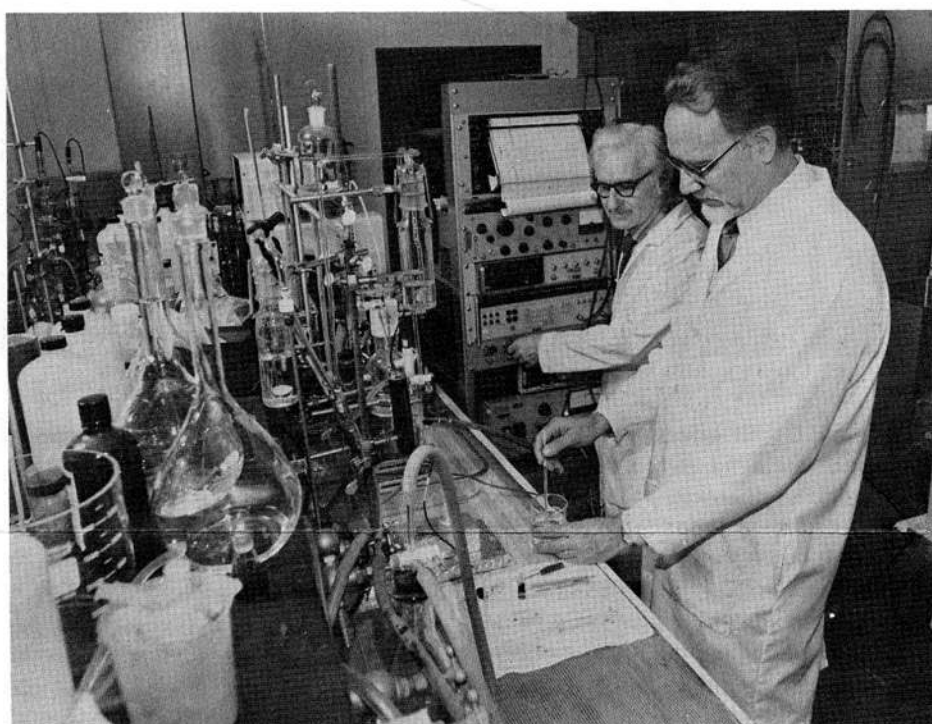
clean enough to be discharged to the sewage treatment plant. The recovered silver was found to be almost 100 percent pure, with just a trace of iron, magnesium and bromine present.

Effective in effluents

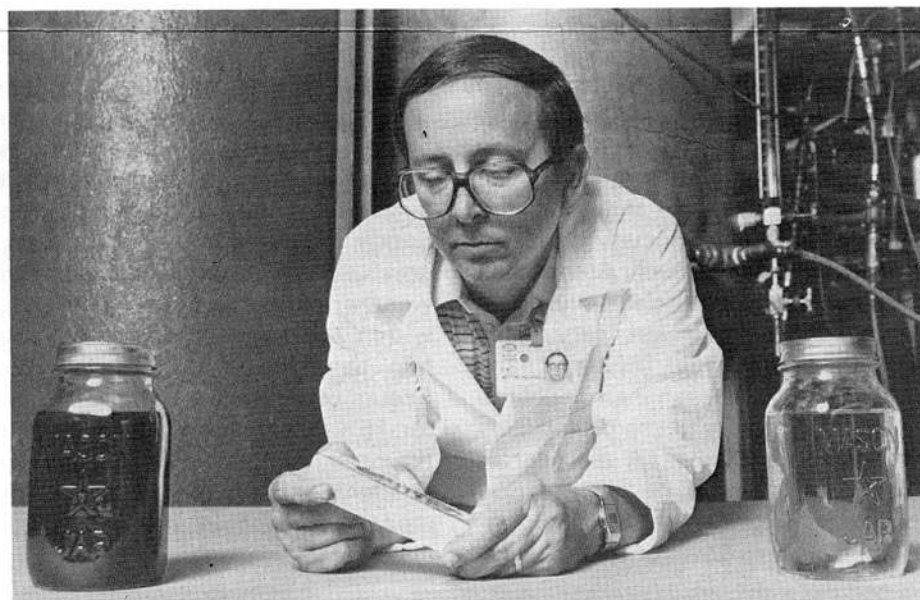
The process also is effective in removing silver from photocopier effluents — usually more difficult since this waste is in the form of a colloid (a suspension of finely divided particles that tend not to settle out of solution) and difficult to filter. But the sodium dithionite treatment causes the silver ions to come out of solution for recovery, just as with photographic wastes.

C. Gary Westmoreland and James S. Johnson, Chemistry Division, have built and tested a full-scale pilot plant that uses the new silver recovery process. It consists of a 750 liter (200-gallon) vat and cross-flow filtration equipment for processing photographic effluents. Approximately 400 grams of silver are recovered from each batch of 550 liters (150 gallons) of photographic or photocopies wastes — or some 80 kilograms annually at ORNL.

Use of the new silver recovery process will result in the annual savings of approximately \$80,000 in disposal costs. At current values, recovered silver will be worth approximately \$25,000 annually.



NEW ORNL PROCESS — Franz Posey prepares a silver solution for measurement while Al Palko adjusts the apparatus. The electrochemists have developed a highly efficient process of recovering silver from ORNL's liquid photographic and photoreproduction wastes.



SILVER RECOVERY — Gary Westmoreland inspects a silver ingot made by melting down silver in black powder form.

UNION
CARBIDE

Nuclear Division News

UNION CARBIDE CORPORATION
NUCLEAR DIVISION
Post Office Box Y
Oak Ridge, Tenn. 37830

EDITOR (Y-12)
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ORGDP
Ruby A. Miller, 574-8092

PADUCAH
Darlene M. Mazzone, Bell 208


INTERNATIONAL ASSOCIATION
OF BUSINESS COMMUNICATORS

Published every other week
for employees such as:



Grant W. Sitzler,
ORGDP's Maintenance
Division.

Paducah surplus sale set October 13

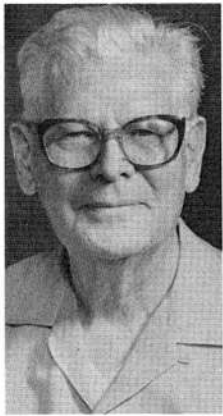
The following items on surplus government property lists at Paducah are being offered for sale via sealed bids:

Underwood calculator; two IBM typewriters; one 1976 Torino station wagon; two 1976 Maverick sedans; two 1976 AMC sedans; three 1976 Ford pickups; two 1976 Dodge pickups; one 1976 Dodge crew cab pickup; one 1974 Chevrolet van; one 1976 Chevrolet van; one 1974 Chevrolet pickup; one 1973 International pickup; one 1971 International stake

truck; one 1974 International cab and chassis; one 1952 Kenworth tractor truck; 11 Cushman industrial trucks; two portable air compressors; one 4000-lb. Hyster fork lift; one 4000-lb. Yale fork lift; one 20,000-lb. Yale fork lift; one 60-ton Osgood crane; one Tennant sweeper; four warehouse tow tractors and one Yazoo riding mower.

To obtain additional information or bid documents, telephone PAX 686 or Bell 282. Bids will be opened in the C-720 Purchasing Conference Room at 12:30 p.m. October 13.

Recent Retirements



William D. Gude
Biology
ORNL
34 years service



Eva A. Roes
Employee Relations
ORGDP
10 years service



Everett Beckham
Engineering Physics
ORNL
30 years service



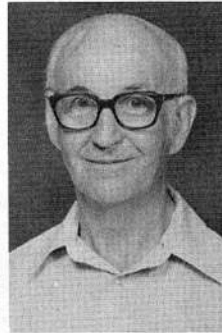
Ralph D. Reynolds
Equipment Services
Y-12
24 years service



Edwin T. Loy
Health and Safety
Research
ORNL
33 years service



Artie T. Holloway
Quality Assurance and
Inspection Engineering
ORNL
29 years service



James E. Borum
Process Maintenance
Y-12
32 years service



Sarah B. Coram
Material Control
Y-12
39 years service

Next issue...

The next issue will be dated
September 30. The deadline is
September 22.



BLOOD DONORS HONORED — Paducah employees who have given three gallons or more of blood were honored recently by the American Red Cross. In presenting the plaques, Plant Manager Clayton Zerby expressed appreciation for the continuous support of these individuals and others who have supported the plant's blood drive. Pictured from left, front row, are Stephen Lewis, Robert Wilkerson and Al Hudson. In the back row are Richard Mitchell, Joseph Gorline, Larry Heavrin, James Jackson, Frederick Thomason and George Chapman. Not photographed were Ed Bazzell, Brad Burklow, Jim Chestnut, Curtis Chenault, J. O. Dobson, Joseph Lyell, Kelly Stratemeyer, Etheridge Suggs and Tommy Thompson.

Question Box

Why not first-aid courses?

QUESTION: Since the first few minutes are the most important in the event of a heart attack, drowning, etc., why can't some of the basic first-aid instructions be given at some of the safety meetings? Something that would really be worthwhile to us and could possibly save someone's life. Previous answers to this question mentioned that we have trained personnel in the plant; but by the time a trained person got to the victim, he or she wouldn't have a chance. If something happens to a fellow employee, this training could be helpful while waiting for the ambulance to arrive; it also could be helpful with our families in case of an emergency.

ANSWER: In order to be proficient in the administration of cardiopulmonary resuscitation, an individual should have eight to twelve hours of serious training with frequent refresher sessions. This formal training can be provided at work for only those employees serving on emergency squads or medical department staff. Elementary first-aid instructions in treating heart attack, drowning, choking, etc., victims are and will continue to be available for employee safety meetings. Thoughtful participation in this basic training could prove valuable, as you suggest. Since safety meeting topics are selected by the organizational unit involved, employees should express their interest in first-aid instructions to

their supervisors or departmental safety committees. Safety Department libraries at each installation contain excellent visual aids on handling emergencies, and medical staff members are available for assistance.

Paducah dance tickets on sale

Tickets are on sale now for the Paducah Plant fall dance to be held Friday, October 1, at St. Mary High School. The featured band will be Hot Tomata. Set-ups and snacks will be available.

Tickets are \$10 in advance and \$12 at the door. Guests may buy their tickets beginning September 20.

Plans also are being made for the Christmas dance to be held at Tuxedo Junction on December 10. Tickets for that event will go on sale November 1. The George Keller Orchestra will provide the music.

Anniversaries

Y-12

35 YEARS

Roy B. Blankenship, Guard Department; Clyde D. Hylton, Utilities Administration; Daniel J. Cooley, Special Services; and Ralph F. Graham, A Wing Machine Shop.

30 YEARS

Ernest L. Croley, General Can Fabrication Shop; Joe G. Harmon, Herman F. Wyrick, Wilbur N. Proffitt, all in Process Maintenance; James P. McMillin, Industrial Hygiene; Peggy L. May, Employment; James C. Morton, Materials Forming; James T. Swaggerty, Quality Standards; and James R. Pelfrey, Tool Department.

25 YEARS

Jay Coates, Douglas L. Frazier, Donald Neely, Art D. Schulte and Bobbie L. Skeen.

20 YEARS

John C. Spoon.

ORNL

35 YEARS

Arnold R. Olsen, Metals and Ceramics; Guy Jones Jr., Chemical Technology; and Stewart E. Dis-muke, Operations.

30 YEARS

Luther M. Jennings, Operations; Loness Guinn, Analytical Chemistry; Sherman A. Reed, Engineering Technology; Everett L. Biddle Sr., Engineering Technology; and Samuel E. Bolt, Engineering Technology.

25 YEARS

Bobby L. Tidwell, Paul L. Hatmaker, James E. Kimblin and William O. Graves.

20 YEARS

Hobart S. Roach and Claude R. McMahan.

Eight Nuclear Division secretaries certified CPS's



Ann M. Aaron, Laboratory Protection, ORNL

Born in St. Marys, Pa., Ann M. Aaron joined Union Carbide in 1977, first in ORNL's Information Division; She transferred to Laboratory Protection in 1979. Prior to coming to ORNL, she was with Airco Speer Carbon Company. She holds an associate degree in specialized business from DuBois Business College.

She and her husband, W. Scott, live at 201 Sweet Lane, Clinton.

Kathy Holt, a native of Sweetwater, joined Union Carbide in 1978 in the Engineering Division. She holds a BS in office administration from East Tennessee State University. She is a member of the Sequoyah Chapter of the Professional Secretaries International, and is serving as recording secretary for the Business Women's Association.

She lives at Route 4, Gaut Addition, Sweetwater.



Kathy Holt, Metal Preparation, Y-12



Audrey B. Livingston, Physics Division, ORNL



Mary Grubb, Maintenance Division, ORGDP

With 20 years of company service, Mary Grubb lives at Route 2, Dogwood Lane, Powell. She is a native of Calloway, Ky., but grew up in Oak Ridge. She has worked in the Purchasing Division and ORNL Thermonuclear (now Fusion Energy) Division, and transferred to the Maintenance Division at ORGDP in 1976.

Grubb has a daughter and three sons.

A native of Anderson County, Audrey B. Livingston has been with Union Carbide 21 years. She is presently attending the University of Tennessee. She worked at ORNL from 1944 until 1958...returning in 1958 after having three children. She transferred from Y-12 back to ORNL in 1972 and has been there since, working at the Holifield Heavy Ion Facility.

Livingston is a member of the Oak Ridge Chapter of PSI.

She and her husband, Robert, live at 7204 Fairlane Drive, Powell. They have four sons and a daughter.



Charlotte Weaver, Process Engineering, ORNL

A native of Clinton, Charlotte Weaver is a graduate of Knoxville Business College. She first joined Union Carbide in 1957, working in Computer Sciences. She left Union Carbide in 1963 to raise her family, returning in 1976.

Weaver lives at 7407 Oxmoor Road, Knoxville. She has a daughter and a son.



Alice Wittmer, Industrial Safety & Applied Health Physics, ORNL

A native of Beeville, Tex., Alice Wittmer joined Union Carbide in 1977. She is a graduate of Durham Business College and attends Roane State Community College. Prior to joining Union Carbide she worked with the City of Altamonte Springs, Fla.; J. P. Stevens Company; Texas Instruments; Western Union Telegraph Company; Southern Fire and Casualty Insurance Company and Union Producing Company.

She and her husband, Larry, live at 2724 Joneva Road, Knoxville. They have two sons. Wittmer is a member of the Oak Ridge Chapter of PSI.



J. Faye Young, Biology Division, ORNL

A native of Evarts, Ky., Faye Young has 18 years service with Union Carbide. She is attending Roane State Community College and works in the Carcinogenesis Section of the Biology Division. Prior to coming to ORNL, she was with Kaiser Engineers.

She and her husband, R. L., live at Route 7, 205 Scenic View Drive, Clinton. They have a daughter and two sons.



Medicine chest

Acne — causes and treatment

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)

QUESTION: My teen-age son has developed acne and the doctor has prescribed antibiotics (tetracycline) to be taken over a long period of time. Is this safe? Would a special diet help? What causes acne, and why do some teenagers have more problems than others?

ANSWER: Approximately 85 percent of postpubescent adolescents have acne. Only about 5 to 10 percent of these cases are severe, but, at this stage in life, the psychological effect of having pimples and blackheads makes acne much more than a simple skin disease.

Treatments have become quite successful in recent years, and soon a new, almost miraculous medication will be introduced after clinical trials have been completed. It is natural to be concerned about the safety of these treatments, because acne is a self-limited disease that usually disappears by the patient's 21st birthday.

Effect of hormones

Acne apparently is caused by the influence of male or male-like sex hormones on oil production in the skin during puberty. In addition to testosterone from the testes in the male, the adrenal glands in both men and women produce a weak male-like hormone called dehydroepiandrosterone (DHEA). Regardless of the origin of these hormones, they stimulate excessive production of sebum, the oil of the skin, in the sebaceous glands. With this continuing stimulus, the sebaceous glands enlarge and produce an excess of skin oil. The lining cells also thicken, partially blocking external oil secretion.

The oil then becomes infected by special skin bacteria that grow without oxygen. They produce enzymes called lipases, which break the oil down into free fatty acids. These acids are irritating and cause the formation of blackheads, which are plugs of thickened oil capped with a mass of dust.

The retained sebum eventually is infected by other skin bacteria, producing pimples and pustules. As the structure of the skin becomes damaged, cysts and scars form.

Other causes

There probably are many factors that cause the formation of acne. It is

due to an interplay of hormones, bacteria, oil characteristics, immunity and possibly even psychological stress, all influenced by genetic susceptibility. Diet does not appear to be a significant factor.

The form of treatment used is determined by the clinical characteristics of each case. A case of severe acne can be a major challenge to a dermatologist and may represent combined skin, hormone and even immune-deficiency diseases. Most modern treatment methods involve the use of lotions or creams containing retinoic acid (tretinoin), benzoyl peroxide or topical antibiotics.

Use of tetracycline

The antibiotic tetracycline frequently is prescribed in capsule form to be taken one to four times a day. It appears to reduce the bacteria population and the concentration of fatty acids in the sebum. It is remarkably effective but must be taken exactly as prescribed (one-half hour before

meals) for as long as four years, and possible toxic reactions often make it less desirable than lotions and creams. It is generally reserved for cases that do not respond to topical medicines.

Possible side effects of tetracycline include mild stomach upsets and vaginal yeast infections. A greatly increased vulnerability to sunburn also occurs in almost 20 percent of patients taking a type of tetracycline called demeclocycline. Even with others, an increased sensitivity to sunlight can occur, and convincing young people to stay out of the sun is not an easy task! Pigmentation or staining of the teeth occurs only if tetracycline is taken before puberty.

Topical acne treatments also may cause some unpleasant side effects, but most of them diminish as the treatment progresses. The skin may become inflamed, and there may be changes in skin pigment after treatment.

A new acne treatment, a synthetic vitamin A called isotretinoin, soon

will be available. It comes from a family of substances called retinoids. The use of this medication promises to revolutionize the treatment of acne. Virtually all patients with cystic acne have experienced almost complete amelioration of their symptoms after an 8- to 16-week treatment period with the pills. The real "miracle" is that the symptoms apparently stay in remission for at least four years. The sebaceous glands shrink in size and remain shrunken. Unfortunately, like most potent drugs, isotretinoin may cause some unpleasant side effects, including sore corners of the mouth, dry mucous membranes in the nose, a separate facial dermatitis, headaches, irritated eyes and an elevated triglyceride (a fat like cholesterol) level in the blood. These conditions all disappear after treatment is concluded.

Because of this new method of treatment, acne soon should become an easily controllable disease in almost all young people.

Develop safe driving habits

As part of the September observance of Traffic Safety Month, Larry Moore of Y-12's Safety Department provided these safe driving tips:

- 1) Ensure that your vehicle is in sound operating condition.
- 2) Be sure that everyone in the vehicle uses seat belts.
- 3) Use turn signals properly.
- 4) Be prepared for errors or erratic behavior by other drivers. Drive defensively!
- 5) Obey all traffic laws.
- 6) Be alert for pedestrians and school zones.
- 7) Change lanes only when necessary and maintain appropriate distance between vehicles.

8) Drive left of the center line only when necessary and where you are authorized to pass.

9) Avoid all "drinking and driving" situations.

PSI seminar set Saturday, Sept. 25

The eight newly certified secretaries will receive their certificates Saturday, September 25, at the Oak Ridge Country Club.

The Oak Ridge Chapter of the Professional Secretaries International will hold their seminar beginning at 8:30 a.m. Additional information may be obtained from Jeanne Moody, 4-2234; or Sheila Brooks, 4-3370.



FOCUS ON FIRE PREVENTION — ORGDP employees are gearing up for the annual Fire Prevention Week program set for October 3-9. In addition to evacuation drills and fire extinguisher demonstrations, divisional safety meetings will feature a color video tape covering fire safety and commonly misunderstood facts about fire insurance. One division has also arranged for a professional chimney sweep to speak on the importance of this activity. Committee members are, standing, from left: Edward D. Bryant, George A. Whitaker, Anthony C. Heitzman, Ulys C. Fulmer, James M. Young, John F. Preston, Thomas Perry, Herbert F. Higdon, Ken I. Roy (co-chairman), Tom Bomar and David A. Coleman. Seated, from left: Larry E. Hodge, Fay B. Duncan, Jimmy D. Bailey, John D. Hoogesteger (chairman), Alan K. Lee, Barbara H. Prewett and Jo H. Stewart. The theme for this year's program is "Fire Safety at Home and on the Job."

ATTENTION VOLLEYBALL TEAMS



**THE RECREATION
DEPARTMENT
IS NOW CALLING
FOR
VOLLEYBALL
TEAMS.**

**CALL 4-1597 FOR
ENTRY FORM.**

**DEADLINE FOR TEAM ENTRY:
OCTOBER 4, 1982**

Nuclear links happenings . . .

ORNL golf...

Dell Morgan's one-over-par score of 73 was low as ORNL closed out the season at Cedar Hills greens. He was followed by C. Allen, 88; J. Wiggins, 78; L. Manley, 78; W. Davis, 78; H. Buffington, 77; S. Smith, 81; J. Amburgey, 78; S. Schrock, 84; and D. Kobisk, 81.

The second flight was taken by O. Rogers, 79; J. Harvest, 81; E. Rawlings, 83; M. Bjerke, 80; D. Montgomery, 82; H. Caudill, 83; E. Hensley, 81; R. Ross, 84; and F. Schmollinger, 88.

E. Westmoreland took Division III, followed by B. Byrum, 92; D. Marshall and N. Schal, 90; H. Adair, 94; G. Lewis and D. Wolfenbarger, 89; D. Easton, 91; J. Setaro, 109; and S. North, 106.

ORGDP golf...

Bill Moon and Jim Kirkpatrick tied for low scores at Southwest Point in ORGDP's final golf tournament of the summer, each scoring 74. Other winners in the first division were M. Gambrell and E. Strunk, 77; C. Cathis, 83; C. Reeves and J. Winters, 82; J. Lovette, 80; E. Brewster, 84; J. Tuggle, 81; J. Shoemaker, 75; F. Hammerling, 84; and G. Bird, 82.

Division II (with 15-20 strokes handicap) saw R. Suter win, with 81;

J. Human, 87; B. Schwab, 82; V. Houston, J. Zollar and R. Campbell, all with 86; P. Wallace, 88; L. Trowbridge, 91; W. Ball and B. Gatewood, each with 88.

Third Division winners were C. Lawson, 93; L. Thorn, 96; B. Fowlkes, 89; K. Bowman, 97; R. Hamby, 93; D. Richardson, 96; J. Lawhorn, 92; F. Wells, 101; E. Murphy, 103; J. Schumpert, 107; R. Conley, 95; W. Plummer, 97; and S. Wheatley, 102.

Y-12 golf...

Y-12ers closed their season at Dead Horse Lake, with Bob Carmack posting a 70 score to take honors there. He was followed by G. Kilough and R. Mathes, each with 74; T. Peek, 76; C. Sehaich 73; J. George, 75; E. Crowder, 76; D. Rowan, 73; D. Lincoln, 82; A. Jones, 80; and R. White, 76.

The second division was taken by C. Turner, 76; R. Vaughan, 88; F. Clayton, 79; R. Angel, 81; F. Manning, 89; R. Boyd, 82; B. Curry, 86; R. Dagley, 91; J. Jones, 88; and H. Henderson, 84.

The third flight went to T. Carpenter, 90; J. McDonald, 100; G. Norton, 95; J. Livingston, 93; J. Forsemey, 94; L. Walton, 92; E. Smith, 93; and H. Dyer and J. Wakefield, each with 97.

Save Energy / Share The Ride

ORNL

VAN POOL RIDER NEEDED from West Knoxville area (Bearden through Farragut) to main portals, 8-4:30. Dean Treadway, plant phone 4-6580; home phone 584-4879.

VAN POOL RIDER NEEDED from West Knoxville (Cedar Bluff, Middlebrook Pike, Vanosdale Road, Cloth World, Kingston Pike) to any portal except South, 8-4:30. Leon, plant phone 4-5723; home phone 693-3211.

VAN POOL RIDERS NEEDED from Sutherland Avenue and Papermill Drive area, to ORNL, 8:15-4:45. D. P. Atkins, plant phone 4-5463; home phone 584-3766.

CAR POOL MEMBER WANTED from Knoxville, Middlebrook Pike/Robinson Road/Piney Grove Church Road (Landmark, Stonebrook and Canby Hills subdivisions), to East Portal, 8:15-4:45. J. W. Nave, 4-4485; or J. W. Simms, 4-5926.

RIDE NEEDED from Oak Ridge Highway between Karns and Solway to East Portal, 8:15-4:45. Peterson, plant phone 4-4483; home phone 690-3989.

VAN POOL RIDERS NEEDED from Walker Springs area (Sans Souci, Plantation Manor, Wesbridge, Brendon Park and Crestwood Hills) to any portal, 8-4:30. Mike, plant phone 4-4885; home phone 691-4194.

TWO CAR POOL MEMBERS NEEDED from Outer Drive between Delaware and California Avenues, 8-4:30. Terry Stansberry, plant phone 6-4854; home phone 483-3381.

CAR POOL MEMBER WANTED from West Knoxville (Cloth World Parking Lot, Kingston Pike) to East or West Portal, 8-4:30. Paula Wright, home phone 588-7765.

Y-12

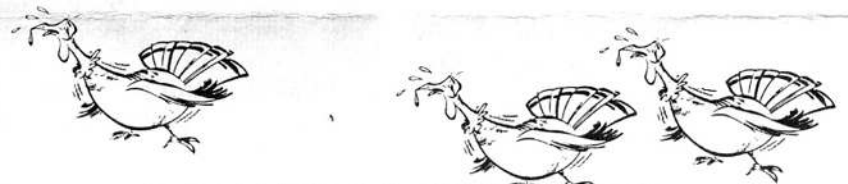
RIDE WANTED from Garden Apartments area, Oak Ridge, to North, East or Biology Portals, 8-4:30. Patricia Chaffee, plant phone 4-0368; home phone 483-1346.

FORM CAR POOL from Walker Springs, Timbers West and Capella to North or East Portal, straight day. Kay, plant phone 6-4921.

CAR POOL RIDER NEEDED from Cedar Bluff shopping center to any portal, 7:30-4. Bill Brosey, plant phone 4-0881; home phone 693-4542.

JOIN OR FORM CAR POOL from Coalfield/Oliver Springs area to West Portal, 8-4:30. Todd Harrison, plant phone 4-3347; home phone 435-1430.

RIDE NEEDED from Oak Ridge Highway, Karns section, to North Portal, 7:30-4 shift. E. J. Laggis, plant phone 4-1966; home phone Knoxville 947-6408.



TURKEY SHOTS

Oak Ridge Sportsman's Association

DATE	TIME	SPONSOR
Saturday, October 2	9-12 noon	Y-12 "C" Shift
Saturday, October 9	9-12 noon	Y-12 "B" Shift
Saturday, October 16	9-12 noon	Y-12 "D" Shift
Saturday, October 23	9-12 noon	Y-12 "A" Shift
Saturday, October 30	9-12 noon	Y-12 "C" Shift
Friday, November 5	9-12 noon	ORNL "D" Shift
Saturday, November 6	9-12 noon	Y-12 "B" Shift
Thursday, November 11	9-12 noon	ORNL "A" Shift
Friday, November 12	9-12 noon	ORNL "C" Shift
Saturday, November 13	9-12 noon	Y-12 "D" Shift
Friday, November 19	9-12 noon	ORNL "B" Shift
Saturday, November 20	9-12 noon	Y-12 "A" Shift
Saturday, November 27	9-12 noon	Y-12 "C" Shift
Saturday, December 11	9-12 noon	Y-12 "D" Shift
Saturday, December 18	9-12 noon	Y-12 "A" Shift

Security inspectors demonstrate skills with revolvers, rifles

Security personnel from the three Oak Ridge plants demonstrated their proficiency at using revolvers, police shotguns and rifles in the Annual Carbide Blue Security Inspectors Weapons Tournament in June.

Inspectors from the Y-12 Plant took first place in three major categories. Their four-person team got 3,083 out of a possible score of 3,600 to win the overall team award. Team members were Ralph Clough, Gary Miller, Gail McGaughey and Mike Rimmer. ORGDP's team came in second with a score of 3,039.

Ralph Clough won the "aggregate" award for individual high score. He scored 809 out of a possible 900. Michael Walls, ORGDP, got second place with an 805 score.

The aggregate award for the women's high score went to Gail McGaughey, Y-12, with Thelma M. Nolen, also of Y-12, taking second place.

Class award categories and winners are listed below:

Revolver

Master:

Gary Miller, Y-12, first place
Doug Nelson, ORGDP, second place

Expert:

Wayne Patrick, ORGDP, first place
Richard Riggs, ORGDP, second place

Sharpshooter:

J. L. Davis, Y-12, first place
Floyd Glenn, ORGDP, second place

Marksman:

R. V. Hamby, Y-12, first place
Gerry Johnson, ORNL, second place

Shotgun

Master:

Doug Nelson, ORGDP, first place
Gary Miller, Y-12, second place

Expert:

Wayne Patrick, ORGDP, first place
Wayne Pierce, Y-12, second place

Sharpshooter:

Floyd Glenn, ORGDP, first place
J. L. Davis, Y-12, second place

Marksman:

Gerry Johnson, ORNL, first place
Hugh Hubbs, ORNL, second place

Paducah tennis...

The Paducah Plant tennis tournament will be held at Noble Park courts October 4-9. Divisions will include Senior's (for men over 40), Women's and Men's. Trophies will be awarded to winners in each division.

To sign up, contact Mark Trail, Bell 248, or Stewart Tolar, Bell 208. Entry deadline is September 30.

Rifle

Master:

Doug Nelson, ORGDP, first place
Gary Miller, Y-12, second place

Expert:

Mike Rimmer, Y-12, first place
Wayne Pierce, Y-12, second place

Sharpshooter:

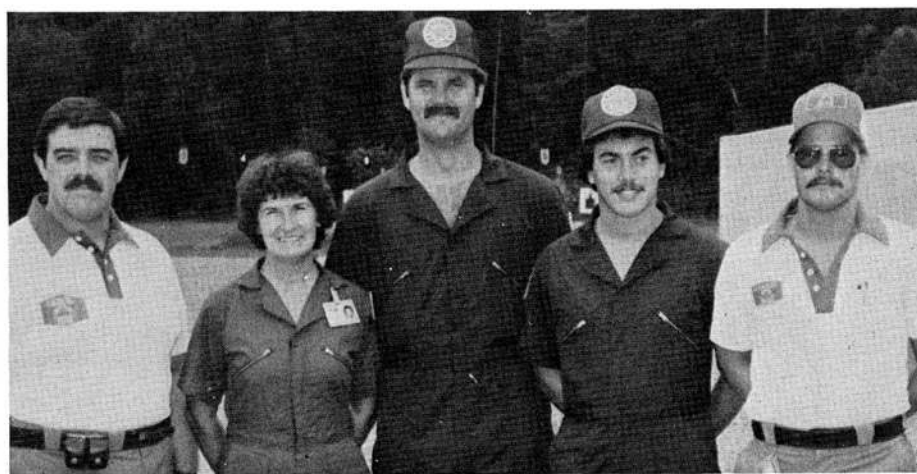
Floyd Glenn, ORGDP, first place
J. L. Davis, Y-12, second place

Marksman:

Gerry Johnson, ORNL, first place
Gary Reynolds, ORGDP, second place

Skeet Shoot

Mike Rimmer, Y-12, first place
Ralph Clough, Y-12, second place



ORNL SHOOTERS — Representing ORNL at the Annual Carbide Blue Security Inspectors Weapons Tournament were, from left: George Parker, Francis Wright, Gerry Johnson, Hugh Hubbs and Gordon Trotter.



ORGDP COMPETITORS — ORGDP's four-person team came in second for the overall team award, but individuals placed first in several of the class events. Participating were, front row, from left: Wayne Patrick, Hugh Schubert, Jerry Sams, Gary Reynolds, Clint Simmons, Mary Yates, Jimmy Miller and Gene Sutton. In the back row, from left: Floyd Glenn, Floyd Glenn Jr., Richard Riggs, Sanford Kilgo, Michael Walls, Scottie Dowdell, Harry Williams and Doug Nelson.



Y-12 CHAMPIONS — The Y-12 Plant's security inspectors took first place in three major categories and several class events. Shown from left, front row, are: Pat Ward, R. V. Hamby, Helen Barnes, Norma Hohman, Thelma Nolen, Gail McGaughey, Randy Jones, Gary Miller and David Campbell. In the second row are: George Cobham, Jim Wampler, Fred Kappleman, David (Mike) Rimmer, J. L. Davis, Wayne Pierce and Ralph Clough.

Junior Achievement business introduces youth to markets



YOUTH ENDEAVORS PAY OFF — Youth Endeavors, the Junior Achievement Company sponsored by the Nuclear Division during the 1981-82 school year, received four awards at the annual banquet for groups in Anderson, Blount and Knox counties last May. Steve DeGangi of the General Accounting Division, who serves as an advisor, helps Youth Endeavors members Cyndy Sims and Leslie Simon display their awards.

Have you ever heard of Rebel Enterprises, Youth Endeavors, Golden Bear Associates, SNAP, WHAM-WHATS or Tin Can T's? These are businesses which started last fall and were liquidated in May 1982. Some made profits and some

incurred losses. All were owned and operated by student members of Junior Achievement (JA).

For several years, Union Carbide has been one of about 20 companies that sponsor JA businesses in And-

erson, Blount and Knox counties. Youth Endeavors, the Carbide-sponsored group last year, closed out its books in the "black" and received several awards for sales, officer leadership and professionalism.

Junior Achievement is an international organization whose purpose is to help educate students to the world of business and economics. Established in 1919, the organization provides students with knowledge of the values, freedoms and responsibilities of the business system; experience in the organization, operation and management of a business; motivation for leadership through developing skills, abilities and confidence; demonstration of the relationships within and between business and the community; and a preview of career opportunities in business.

Students form and name their own business, sell stock at \$1 per share to obtain operating capital, design and manufacture a product, sell the product (or service), keep records and liquidate the business at the end of the school year.

About 35 students from Oak Ridge High School operated Youth Endeavors last year. They met each week at the Anderson County Sheltered

Workshop. The products they selected were bird houses, bird feeders and oven jacks. Sales exceeded \$1000, and the company was able to give its stockholders a nice return on their investments.

Companies like Union Carbide provide financial assistance to JA and encourage employees to participate as advisors to the student groups. Last year, Gary Calvert and William Simon of the ORGDP Operations Division and Steve DeGangi, General Accounting Division, served as advisors.

This year's advisors are Kathy Coleman, Y-12 Employee Relations; Steve Cortelyou, Y-12 Fabrication; Steve DeGangi; B. Wayne McLaughlin, ORGDP Maintenance; and Lillie Ann Smith, General Accounting. Nuclear Division Finance Manager Jake Denton is a member of the Junior Achievement Board of Directors. Gary Riser, manager of Accounting, and Norm Sparks, supervisor in the Payroll Department, are executive advisors.

Children of Nuclear Division employees who are interested in participating should check the school bulletin boards for an announcement of the first organization meeting.

ND Community Service Award recipients active, committed

(Continued from page 1)

Kenneth W. Carpenter, Paducah — Carpenter, who devotes some 1000 hours a year to community service, has been involved with the Boy Scouts of America for the past 14 years. He established an astronomy merit badge training program; has worked as a counselor for other scouting training programs; and currently serves as an assistant scoutmaster. Carpenter has served on the boards of directors for the McCracken County Khoury Ball League, the South McCracken County Community Center and the McCracken County unit of the American Cancer Society. He was instrumental in establishing the McCracken County Science Fair and works as a mathematics and science counselor for local schools. Carpenter, who lives in West Paducah, is a chemist in the Technical Services Division.

Charles F. Chandler, Y-12 — Chandler has been involved in volunteer service to the Claxton community for some 15 years. He organized the renovation of the Claxton Community Center building and has served as chairman of the youth oratorical program, the Respect for the Law Week program and the continuing Christmas program for underprivileged children. He worked with the Tennessee Valley Authority to obtain both a building for local Boy Scouts and land for a recreational field. Chandler also helped arrange and organize the use of the TVA car wash for the Claxton Optimists' Club

fund-raising efforts and has served the club in several other leadership roles. He is a supervisor in the Y-12 Maintenance Division.



Bobby L. Collier, ORGDP — Collier has been involved in volunteer activities with the Jaycees for the past 10 years, devoting between 800 and 1000 hours of work each year. This included establishing programs, serving in various offices, competing for awards and honors and chairing committees at both the state and local Jaycee levels. He also has been involved in many other civic organizations and activities, including church work and community service. Collier, a Kingston resident, is a supervisor of buildings and grounds in the ORGDP Maintenance Division.

Charles C. Coutant, ORNL — Coutant has been involved in several volunteer activities in Oak Ridge during the past 10 years. In his work with the Camp Fire Girls, he has held the positions of president, board member and committee chairman. In 1981 he received the Gulick Award, the highest given by a local council. Coutant has served as vice chairman and chairman of the Environmental Quality Advisory Board and is current president of the Citizen's Council for Clinch River Planning. As cochairman of the Environmental Action Council, he was instrumental in setting up a recycling center for glass and paper. A resident of Oak Ridge, Coutant is a senior research staff

member in the ORNL Environmental Sciences Division.

William B. Crowder, Y-12 — During Crowder's 28 years of service as a Shriner, he has helped many children who are physically handicapped or severely burned to obtain the necessary health care, medical supplies, clothing, wheelchairs, braces and other aids. He has furnished transportation to the Shriners Hospitals for both children and their parents, and he has performed as a clown at parades and other activities for handicapped children. Crowder has devoted more than 500 hours a year to the Shriners and has served in various leadership roles. A process operator in the Y-12 Metal Preparation Division, Crowder lives in Clinton.

Donald G. Elrod, Paducah — Elrod, who has served as chief of the West McCracken Fire Department and Rescue Squad for 20 years, devotes some 500 hours per year to promoting advanced training for improving the quality of local fire protection. He supervises a group of emergency medical technicians and instructs many classes each year in first aid and CPR for church and civic groups, as well as for Carbide employees. Elrod was instrumental in organizing the Rescue Squad, in securing a new fire truck and in obtaining emergency equipment for community vehicles. He also is a member of the International Society of Fire Service Instructors. A maintenance mechanic in the Fabrication and Maintenance Division, Elrod lives in West Paducah.

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